

The Groundplane



New Dinner Location — Sheep King Restaurant 3213 Walnut Avenue 6PM

Newsletter Editorial — By Bill Artelt, WB9YVM

Greetings everyone and welcome to this month's issue of the SBARA Groundplane!

So many things are happening this month it's hard to put everything in print! Did you see the 40th Super Bowl? That was an interesting game. Both teams came close to victory but in the end the Steelers prevailed. As the 2005 football season closes, thoughts turn to the Winter Olympics in Turin, Italy. America is in the process of finalizing their selection of athletes and will present a very talented slate to the World.

In case you have not heard, we have a DXExpedition taking place in Antarctica. 3Y0X has the latest information including fantastic photos at: <http://www.peterone.com/> Fellow hams include operating times and QSL information.

For our younger hams, check the Adventures of Zack and Max in their latest adventure to England. This is presented in conjunction with ICOM America. Be sure to check the stories at: <http://www.icomamerica.com/amateur/comic%5Fbook/> there is even a comic book to download to color

(older hams will like this too)!

In this issue we talk about a "T" Hunt antenna that you can assemble. Our fellow "Techies" like the thrill of finding the hidden "T" with gear they made themselves. They relentlessly work to improve their setups. Mystery lovers and dyed-in-the-wool contesters love the challenge, because every hunt is a fresh start to a new adventure. Your past performances are forgotten. It's just your team and your equipment against today's hider and the other hunters. Our Calendar of Events shows dates for the "hunt."

We hope you enjoy this issue of the Groundplane! As always everyone is asked to jump-in and assist us to make SBARA a fun place to hangout for all things Ham Radio!

73'es, Bill WB9YVM

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New Dinner Location

The name is Sheep King Restaurant. The address is 3213 Walnut Avenue. The Telephone is 510 744-9829. The restaurant is located behind Black Angus.

*February, 2006
Volume 7 Issue 2*

**I Declare the
Games Open !!**

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Articles of Interest

- Zucchini Festival 2006
- "T" Hunt Antenna
- February Raffle Prize
- HRO Ad

Zucchini Festival — By Al Rendon, WT6K

How does SBARA raise the funds to pay the rent at the Veterans Building and sponsor all the year's activities? The answer is by our membership participating in fundraising events, like the Hayward Zucchini Festival. Last year we received \$1,300 for our support in 2004.

The Zucchini Festival has the potential to be SBARA's major fundraiser if we can recruit enough participants to fill all the shifts on both days of the festival. We start early to achieve filling every shift, so at the February SBARA meeting you will be asked to consider signing up for a shift on August 19th or 20th. You do not need to bring anything since the Festival provides the Business Band

Transceivers. It's fun for the family too.

If you are interested in bringing the entire family Mike Fung WA6AWI will provide a family pass for any member who signs up for a shift. If you haven't participated in the past give it a try this year.

The festival is close by in Hayward and takes only a few hours of your time.

The benefit is enormous for SBARA.

Al Rendon

WT6K

Raffle Prizes — Gene Arrillaga,

KF6ZYD As predicted, the solar cycle is declining. The sun has been spotless since January 29, and daily readings of zero sunspots could continue for another week. We will observe more and longer periods such as this as we head toward the solar minimum, still expected about to occur about a year from now. So what are you going to do for radio excitement? Try working through satellites. All you need is The Radio Amateur's Satellite Handbook. and some tracking software like Nova. Not surprisingly that's what SBARA is offering in this month's raffle.

The Radio Amateur's Satellite Handbook An ARRL publication covering everything you need to know about communicating through the orbiting amateur satellites. Contents include:

I: Introduction to the satellite program

II: Introduction to satellite communications-getting started, analog and digital communications.

III: Technical Reference- 9 chapters

Plus 7 Appendices and a Glossary.

And because you can't work it if you can't find it we offer Nova the popular Windows-based satellite tracking program. Nova includes realistic maps that are shaded to show vegetation, topography, and ocean bathymetry. Satellite positions are shown with accompanying ground tracks, orbital paths, and star background. Updating Keplerian elements is a breeze. You can drag-and-drop a file onto Nova or use its new built-in Internet download function to download new elements with a single mouse click.

System requirements: Pentium or similar processor; 256 colors (or more) graphics; Sound card; Microsoft Windows 95, 98, 2000, XP, or NT; at least 16 MB RAM; 12 MB free hard disk drive space. Sorry fellow Mac users.

Again this month the buy-in will be \$5 for 5 tickets. If you wish to increase your chances of winning additional tickets will be available. Good luck.

Useful Helps — By Mike Studer, K6EEP

I will be holding a soldering workshop at the Veterans Center in March the day after our March meeting. I plan on teaching both soldering, desoldering, and some simple circuit board repair.

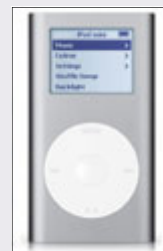
I have been soldering since I was about 8 years old. My dad worked in QA for IBM and he taught me. In the military I went to soldering school and was certified to do mil spec soldering for aircraft. Most of that sort of thing is done under a microscope.

I will be showing you how to select the correct solder for the project you are doing. I will also discuss the types of soldering irons you can use and how to select the correct one for your project. For desoldering I will show you how to use one of those spring loaded solder suckers. And how to use desoldering wick too. For some simple circuit board repairs I will show you how to fix lifted runs. And maybe some other tricks I want to get everyone comfortable with soldering. And I want people to know what to look for in good solder connections.



Even if you don't want to attend I could use your support. I need old circuit boards to use in the workshop. They don't have to work and they can be broken. Bring them to the next couple of meetings and I will collect them.

**Do you know what
these are ?
Details in this issue!**



ARES meets the Thursday after SBARA's monthly meeting (third Thursdays) at 7:30PM at 3300 Capitol Street, Building B in the Administrative Training Room. Talk in on the 147.015 repeater.

ARES will be holding a Command, Communications and Control workshop in support of the CERT program on Saturday February 18th from 9AM till noon in the Administrative Training Room.

ARES will host a Packet Training class for any interested hams on Saturday March 11th from 9AM to noon in the Administrative Training Room.

ARES will be providing communications support at the CERT April 8th Drill. Location and times are available at www.fremontcert.org.

A specialized group of emergency communicators will be supporting the

Fremont PD entry in the Baker 2 Vegas marathon on April 1 & 2.

Volunteers are encouraged to support this effort. For more info see <http://www.baker2vegas.org/>

A Poor Man's Fox Hunt Antenna — By Bernard Hailer, DL4MHK/W6

I've recently arrived in California, I live and work now in Fremont, where I will stay for the next years. Being a radio amateur for a few years already (I've got my license 1992 in Germany), of course I had to contact the local amateur radio club, which is the SBARA. The first speaker I heard was Don Ferguson, KD6IRE, about Transmitter Hunts, and I got infected with the T-Hunt virus...

So, I ordered a MK4 Sniffer (a t-hunt receiver with some nice features) from VK3YNG, joined the hunter team of Al WT6K, Syd W6QWK, Loretta and Roger KE6NAN, and all I still needed was a lightweight handheld antenna for getting the bearing to the next fox.

Internet is a great invention. You will find anything you need. Including ideas how to build such an antenna yourself. A project built and used already many times by other amateurs was a three element antenna made by Joe Leggio, WB2HOL from PVC tubing and some cut tape measure for the elements (see links at the end of this article!). Well, I built one, and then tried also a four element antenna described on the BARC website (this one apparently has been removed meanwhile). I will describe both, a three and a four element antenna. The four element antenna is slightly less stable, but it has helped our team to make the first place the very first time it was used in a fox hunt! And the best is: these antennas cost less than 15 dollars!

Required tools

- solder iron, solder
- a hacksaw
- a knife to take insulation off when preparing the RG-174 connections
- a knife to scrape off paint from tape measure tips

Material

- $\frac{1}{2}$ inch Schedule 40 PVC tubing material
- tape measure (25 foot is plenty)
- 5 inches of any piece of wire for hairpin match
- 3 or 4 wine corks, preferably plastic; to be cut in halves
- 3 foot RG-174
- 1 male BNC plug (or, if you prefer, the smaller SMA) for RG-174.

If you want, some Velcro and colored insulation tape.

The PVC stuff is extremely cheap and easy to cut and drill. When cutting the PVC tube, take into account that the ends don't meet at the middle of the connectors, i.e. they must be shorter than the dimensions listed in the schematic: you must make the tubes 1 in shorter than the listed distance between the elements.

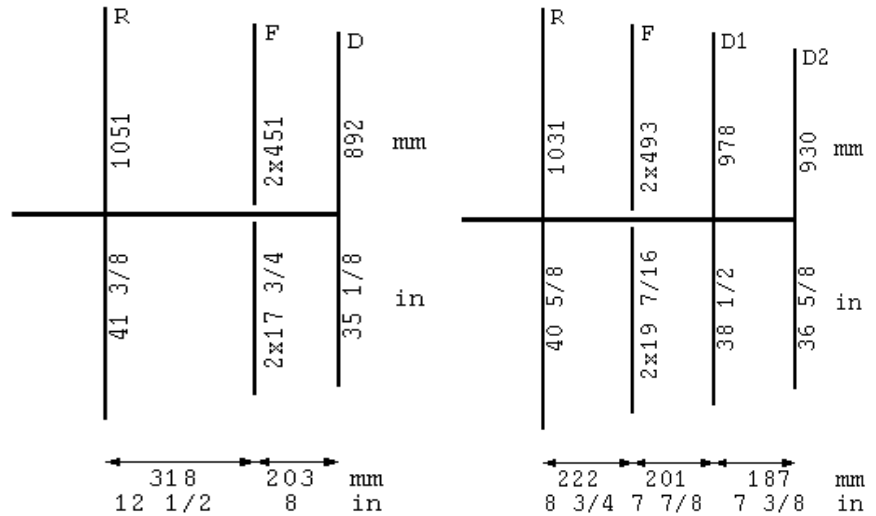
Connecting the feed element is tricky.

* First I scraped off the paint from the ends of the tape measure material and put some solder on it instead so that solder is easily accepted later.

* Then I used two corks to fixate the two halves inside the cross connector (in this case real cork material is better, it does not melt when hot - put in the plastic cork halves later). Three holes must be drilled into that connector from top, to allow the hairpin match and the RG-174 to go through. Then you can solder these wires where they belong through one of the openings of that cross connector. It's a little awkward, but it works.

A Poor Man's Fox Hunt Antenna (cont'd.) — By Bernard Hailer, DL4MHK/

3 Element	4 Element
Boom 2 ft Schedule 40 tube, 1/2" cut into pieces: R-F: 11 1/2 in F-D: 7 in handle: rest 1 cap (handle end) 2 X connectors 1 T connector	Boom 3 ft Schedule 40 tube, 1/2" cut into pieces: R-F: 7 3/4 in F-D1: 6 7/8 in D1-D2: 6 3/8 in handle: about 6 in 1 cap (handle end) 3 X connectors 1 T connector
Elements 10 ft tape measure, not too wide	Elements 15 ft tape measure, not too wide
Hairpin match any piece of wire 112 mm / 4 3/8 in (plus solder length!)	Hairpin match any piece of wire 112 mm / 4 3/8 in (plus solder length!)
Additionally 3 wine corks, preferably plastic; to be cut in halves 3 feet RG-174 1 BNC plug (male) (or, if you prefer, the smaller SMA) for RG-174.	Additionally 4 wine corks, preferably plastic; to be cut in halves 3 feet RG-174 1 BNC plug (male) (or, if you prefer, the smaller SMA) for RG-174.



Images: the 4-element fox hunt antenna, and a detail image of the VK3YNG Sniffer

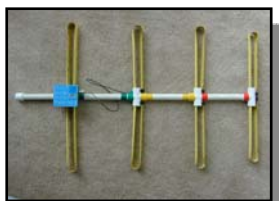
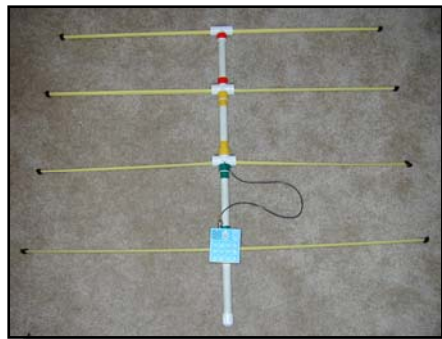
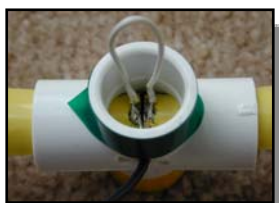


Image: The ends of the cut tape measure are sharp and must be protected. I've used Velcro, which also allows to fold the antenna so that it can be transported more easily. The boom segments were color coded with insulation tape to make reassembly easier.



Enjoy the wine needed to get the required corks!

Images: „hairpin match“ and wine cork in X connector to hold tape measure.

Further Events, Et Al — By William Artelt, WB9YVM

From Useful Helps Page.....Notice anything familiar? One is a groundbreaking consumer electronics device released in a range of catchy colours enabling a hugely addictive portable listening experience - the other is the ipod mini. The [Regency TR-1](#) was the first commercially sold portable transistor radio, released in 1954, moving radio away from being a piece of furniture and in to the pockets of youngsters keen to not share their listening experience with their parents. One of the early advertising slogans ran "See it! Hear it! Get it!" - not to be confused with the GWR radio music download service (2005) "[Hear it, Buy it, Burn it!](#)" Around 25,000 people viewed this image (before it was deleted by flickr due to an issue over copyright of one of the images), maybe another form of nostalgia now that the ipod nano is on sale....

HFPACK Saturday & Sunday Net Schedule

1130z, 1630z, 2230z UTC on 14342.5 kHz USB

14343.2 CW (Worldwide)

Alternate: 18157.5 kHz USB & 18158.3 kHz CW

HFpack CW Frequencies

Worldwide Primary: 10117.5 kHz CW

14059CW (Worldwide), 18081.5CW (Worldwide)

7038.5 (North America), 7022.5CW (Region 1)

News and Information — <http://www.hfpack.com>

<i>Date</i>	<i>Time</i>	<i>Description</i>
February 3, 2006	7:00 PM	Board Meeting
February 4, 2006	5:00 PM	Transmitter Hunt - Easy/Hard
February 10, 2006	7:30 PM	General Meeting - Speaker - Baker to Vegas Communications
February 13, 2006	7:00 PM	Sunnyvale VEC Exam - Fremont
February 18, 2006	5:00 PM	Transmitter Hunt - Foxes Choice
March 3	7:00 PM	Board Meeting
March 4	5:00 PM	Transmitter Hunt
March 5	7:00 AM	Livermore Swap - Robertson Park
March 11	5:00 AM	Foothill Flea market
March 10	7:30 PM	General Meeting
March 13	7:00 PM	Sunnyvale VEC Exam - Fremont
March 18	5:00 PM	Transmitter Hunt - Foxes Choice

Folks - I didn't receive ANY additions to last month's calendar. I'm looking for input - whether it is ARRL contests you think other people would like to know about, testing, whatever. Please let me know by dropping me an email at steve@ka6s.com.

Handy Web Links

SBARA Web Site	http://www.sbara.org
ARRL Main Site	http://www.arrl.org/
ARRL SCV Division	http://www.arrl.org/sections/SCV.html
ARRL East Bay Section	http://www.pdarrrl.org/ebsec/index.html
ARRL Contest Page	http://www.arrl.org/contests
Contest Calendar	http://www.hornucopia.com/contestcal
Callsign Lookup (QRZ)	http://www.qrz.com/
Vanity Callsign Info	http://www.vanityhq.com/
IRLP Main Page	http://www.irlp.net/
AMSAT	http://www.amsat.org/
FCC Services	http://wireless.fcc.gov/services/amateur

SBARA on the Internet

<http://www.qsl.net/sbara>

On the Air at 147.015 + PL 103.5

Fremont Repeaters & Net Information

WA6PWW - 147.015 +600Khz, PL 103.5
 WA6PWW - 223.900 -500Khz, PL 107.2
 WA6PWW - 442.600 +5Mhz, PL 107.2
 N6OXR - 146.94 -600Khz, PL 123.0
 N6OXR - 441.525 +5Mhz, PL 123.0
 ARES - Tuesday @ 7:30pm - 147.015 + PL 103.5

Groundplane SBARA Newsletter Copyright 2006 SBARA

The Groundplane is published monthly by the South Bay Amateur Radio Association. Articles and letters are always welcome. The normal deadline for material is six days prior to the end of the previous month. Articles can be sent by email to hamradio@comcast.net or via U.S. Mail. Contact the Editor for details and submission guidelines.

The opinions expressed in the Groundplane are strictly those of the authors.

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Treasurers Report — By Bernard Hailer, DL4MHK/W6

On the board meeting on Feb 3rd, 2006, the budget for 2006 has been approved. To set this budget up, the estimates for and the money really spent or received last year were categorized and put together in a table, and the estimates for 2006 were based on these amounts.

As new treasurer of SBARA I have inherited a cash box of sound health. Last years board did a great job to build it up! The target this year must be to keep it that way, but: things become more expensive, and the SBARA is forced to pay more just to survive. Examples are the fee for our post box and the Veteran's Hall rent - they were more or less painfully increased. Also, with money

available, we can increase our activities to attract our radio amateurs and maybe other people who might become interested in this hobby.

So, what can we do to keep our cash in a good shape? Membership fees are a part of this. There are still payments open, please remember to send them to Syd. Also some events are in an early planning phase to raise some funds.

We hope that we can again earn money during this year's Zucchini Festival, and let's also work on other events which might bring us members or money.



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The Ultimate Radio!

ALINCO



DJ-196T 2M/HT

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- Front Panel GPS in • Rear DB-9 port
- CTCSS/DCS Encode/Decode built in

Low Pricing!

The Ground Plane



ANNOUNCEMENTS

SBARA monthly meeting:
February 10th.
Veterans Hall in Niles

It's February — Come on Down and Have Some Fun !!!

The Ground Plane—KU6S

<http://www.sbara.org>

South Bay Amateur Radio Association — SBARA

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